Index

Index 1

1AC – Inherency 2

1AC – Plan 4

1AC – Solvency 5

1AC – Adv – Hegemony 6

1AC – Adv – Energy 10

Hegemony 2AC Extensions 14

1AC – Inherency

**Competition increasing among other major powers to invest in lunar mining technology**

Williams ’07 (Mark, contributing editor to *Technology Review* published by MIT, “Mining the Moon”, <http://www.technologyreview.com/Energy/19296/> Thursday, August 23, 2007, DOA: 7/20/11 JL)

At the 21st century's start, few would have predicted that by 2007, a second race for the moon would be under way. Yet the signs are that this is now the case. Furthermore, in today's moon race, unlike the one that took place between the United States and the U.S.S.R. in the 1960s, a full roster of 21st-century global powers, including China and India, are competing. Even more surprising is that one reason for much of the interest appears to be plans to mine helium-3--purportedly an ideal fuel for fusion reactors but almost unavailable on Earth--from the moon's surface. NASA's Vision for Space Exploration has U.S. astronauts scheduled to be back on the moon in 2020 and permanently staffing a base there by 2024. While the U.S. space agency has neither announced nor denied any desire to mine helium-3, it has nevertheless placed advocates of mining He3 in influential positions. For its part, Russia claims that the aim of any lunar program of its own--for what it's worth, the rocket corporation Energia recently started blustering, Soviet-style, that it will build a permanent moon base by 2015-2020--will be extracting He3. The Chinese, too, apparently believe that helium-3 from the moon can enable fusion plants on Earth. This fall, the People's Republic expects to orbit a satellite around the moon and then land an unmanned vehicle there in 2011. Nor does India intend to be left out. (See "India's Space Ambitions Soar.") This past spring, its president, A.P.J. Kalam, and its prime minister, Manmohan Singh, made major speeches asserting that, besides constructing giant solar collectors in orbit and on the moon, the world's largest democracy likewise intends to mine He3 from the lunar surface. India's probe, Chandrayaan-1, will take off next year, and ISRO, the Indian Space Research Organization, is talking about sending Chandrayaan-2, a surface rover, in 2010 or 2011. Simultaneously, Japan and Germany are also making noises about launching their own moon missions at around that time, and talking up the possibility of mining He3 and bringing it back to fuel fusion-based nuclear reactors on Earth. Could He3 from the moon truly be a feasible solution to our power needs on Earth?

**Lunar return excluded from Obama’s Space Policy**

Whittington, ‘10 (Mark, Author of Children of Apollo and The Last Moonwalker and has written on space subjects for a variety of periodicals, including The Houston Chronicle, The Washington Post, USA Today, the L.A. Times, and The Weekly Standard; “Obama Rolls Our Latest Version of NASA Space Plan”, Associated Content, April 16, 2010, <http://www.associatedcontent.com/article/2899744/obama_rolls_out_latest_version_of_nasa_pg2.html?cat=9>, DOA: 7/20/11, JL)

President Obama Outlines His Plan at Kennedy Space Center from SpaceRef on Vimeo. President Barack Obama stopped by the Kennedy Space Center on his way to a fund raising party at Gloria Estefan's house to announce the latest version of his NASA space plan. His speech was long on rhetoric and short on substance. Speaking to a hand-picked audience that included astronaut Buzz Aldrin, Neil deGrase Tyson, and Bill Nye "the science guy," President Obama began his speech with a soaring, inspiring account of NASA's first five decades. All of the bases were touched, including the Mercury Program, the Gemini Program, the Apollo landings on the Moon, and the space shuttle program, due to come to an end at the conclusion of this year. President Obama paid special attention to the Hubble telescope, referring to a picture of Jupiter that the Hubble took and a copy of which resides in his private office. Barack Obama repeated the oft told story of how his grandfather held him up on his shoulders to watch the crew of Apollo 11 disembark to Hawaii. President Obama continued with boasting about how committed he was to space exploration and acknowledging the opposition to the first version of his space plan rolled out with his FY2011 budget proposal several months ago. Then Obama announced the newest iteration of his space plan; call it Obamaspace 3.0. It is actually the fifth version of his space policy if one includes the two versions announced during the campaign. The new features of Obamaspace 3.0 include the following: The escape pod version of the Orion space capsule, announced a few days ago in Obamaspace 2.0, would eventually become a fully realized space craft capable of venturing beyond low Earth orbit. Research would commence of a heavy lift launch vehicle, using "new designs, new materials, new technologies" with construction to commence no later that 2015. Then, over a decade hence, the first voyages beyond low Earth orbit would commence. "Early in the next decade, a set of crewed flights will test and prove the systems required for exploration beyond low Earth orbit. And by 2025, we expect new spacecraft designed for long journeys to allow us to begin the first-ever crewed missions beyond the Moon into deep space. So we'll start -- we'll start by sending astronauts to an asteroid for the first time in history. By the mid-2030s, I believe we can send humans to orbit Mars and return them safely to Earth. And a landing on Mars will follow. And I expect to be around to see it. " New propulsion and other technologies would facilitate these voyages. However the Moon was specifically excluded in Obamaspace 3.0. "Now, I understand that some believe that we should attempt a return to the surface of the Moon first, as previously planned. But I just have to say pretty bluntly here: We've been there before. Buzz has been there. There's a lot more of space to explore, and a lot more to learn when we do" While the inclusion of a series of destinations was an improvement over previous versions of Obamaspace, the reaction to the announcement has been somewhat less than enthusiastic in certain quarters. Former NASA Administrator Mike Griffin dismissed the speech. "We had an integrated architecture. They have hope. We had a 'public option' along with commercial alternatives, when and as they matured. They have a commercial option only, they are leaving the International Space Station a hostage to fortune, and they are spending money on technology in what might be termed a faith-based initiative. We knew how to replace (the) shuttle, get to the moon, and go on to Mars. They don't." Others, including those representing commercial space interests that plan to benefit under Obamaspace 3.0, were more enthusiastic. The substance in President Obama's speech, particularly the exploration portion, seemed to be sparse. President Obama proposed just three voyages of exploration, starting fifteen years from now and stretching over twenty years, as part of his plan. By contrast the Apollo Moon landing program conducted six lunar voyages in just over three years. Even the much maligned Constellation program envisioned two trips to the Moon per year, as a start. Also, by bypassing the Moon, President Obama is eschewing the idea of going to a destination in space where people can live. Scientists have discovered that the Moon has resources, including more abundant water ice than had hitherto been imagined, thanks to the findings of India's Chandrayaan-1 and America's LCROSS space probes last year. Many space analysts tout the Moon as the venue of the first community of humans beyond the Earth, a settlement that would be a center of science and commerce, a beachhead that would make further exploration into the Solar System more easy and more extensive. Behind the soaring rhetoric, the substance of President Obama's space program has less than a handful of exploration voyages, footsteps and flags, but without the flags and with no footsteps until humans set foot on Mars sometime in the far future. Unlike a lunar return, there seemed to be no overarching purpose for the Obama space exploration program aside from a scramble to assuage critics of Obamaspace without spending too much money up front. President Obama's vision for space is thin gruel indeed and is not likely to be met with universal enthusiasm.

1AC – Plan

Plan: The United States Federal Government should substantially increase the development of space by building a lunar mining facility.

**1AC – Solvency**

**Life on moon feasible**

Whittington, ’11 (Mark, Author of Children of Apollo and The Last Moonwalker and has written on space subjects for a variety of periodicals, including The Houston Chronicle, The Washington Post, USA Today, the L.A. Times, and The Weekly Standard; “Mile Long Lava Cave Could be Site of the First Lunar Settlement”, <http://old.news.yahoo.com/s/ac/20110307/sc_ac/8012712_milelong_lava_cave_could_be_site_of_the_first_lunar_settlement_1>, Monday, March 7, 2011, DOA: 7/21/11 JL)

Another recent discovery on the moon by the Indian Chandrayaan-1 lunar probe suggests that, contrary to Obama administration space policy, the moon remains the prime first destination for any astronauts venturing beyond low Earth orbit. The Chandrayaan-1 discovered a mile-long, 393-foot wide cave near the lunar equator at the Oceanus Procellarum. The cave, called a lava tube by lunar geologists because it was formed by lava flow likely billions of years ago, could be the prime location for a lunar settlement. Insulated from the extremes of heat and cold on the lunar surface, the Oceanus Procellarum lava tube maintains a constant minus 4 degrees Fahrenheit. It is shielded against radiation, meteor strikes and lunar dust. The one disadvantage is that the Oceanus Procellarum lava tube is a far distance from the frozen water deposits that exist in the deep, shadowed craters at the lunar poles. Water would have to be extracted from the hydroxyl in the lunar regolith or somehow shipped up from a mining facility at the one or both of the poles. Still, with the recent discovery of a variety of lunar resources, water chief among them, added to the revelation of the Oceanus Procellarum lava tube, the question arises: Why not go back to the moon? The moon provides so much that humans can use to not only live but thrive there, logic and common sense dictate that the moon must be the first destination beyond low Earth orbit. A lunar settlement at the Oceanus Procellarum lava tube, or perhaps a similar one closer to one of the poles should such be discovered, would be the perfect venue for the first real community of human beings off the surface of the Earth. Shielded in their day-to-day existence from the extremes of the lunar environment, the first human settlers of the moon can turn their attention to a variety of tasks, chief among them is exploring in detail the "eighth continent" that is in view in most night skies on Earth. Using the resources of the moon, a lunar settlement would enable the exploration of the Solar System, as a jumping-off point and refueling station. When fusion energy becomes reality, sometime later perhaps in the 21st century, helium 3 would become an export commodity for this new human community, making it economically viable. Rare Earth elements could also be an export product. What, therefore, are we waiting for?

1AC – Adv – Hegemony

China is limiting rare earth metal exports – mining the Moon would provide the US with these crucial elements

David ‘10 (Leonard, SPACE.com Space Insider Columnist, “Is Mining Rare Minerals on the Moon Vital to National Security?” SPACE.com, October 4th, <http://www.space.com/9250-mining-rare-minerals-moon-vital-national-security.html>)

The seemingly barren moon may actually be a treasure-trove of priceless resources: a potentially bountiful, mineral-rich ? yet untapped ? cosmic quarry. Still, few see the moon as an alluring mining site, ripe for the picking of rare elements of strategic and national security importance. Here on Earth, China recently blocked the export of rare earth elements to Japan for use in an array of products; from wind turbines and glass for solar panels to use in hybrid cars, and even guided missiles and other defense-oriented creations. China is increasingly putting the pinch on quotas of such elements out of their country. And as the scarcity of these valuable minerals grows, so too does the concern in other nations regarding the availability of this limited resource. For instance, a recent report from the Congressional Research Service a study arm of the U.S. Congress reviewed the worldly use of rare earth elements for national defense. The report looked at the production of elements such as europium and tantalum, among others, outside the United States and flagged the important issue of supply vulnerability. The study pointed out that rare earth elements are used for new energy technologies and national security applications and asked: Is the United States vulnerable to supply disruptions of these elements? Are they essential to U.S. national security and economic well-being? Among the policy options flagged in the Congressional Research Service assessment is establishing a government-run economic stockpile and/or private-sector stockpiles. Doing so "may be a prudent investment," the study noted, and would contain supplies of specific rare earth elements broadly needed for "green initiatives" and defense applications. Local concentrations Given all the mineral mischief here on Earth, the moon could become a wellspring of essential resources but at what quality, quantity and outlay to extract? [10 Coolest New Moon Discoveries] Providing a lunar look-see is Carle Pieters, a leading planetary scientist in the Department of Geological Sciences at Brown University in Providence, R.I. said, "Yes, we know there are local concentrations of REE on the moon," Pieters told SPACE.com, referring to rare earth elements by their acronym REE. "We also know from the returned samples that we have not sampled these REE concentrations directly, but can readily detect them along a mixing line with many of the samples we do have." Pieters is also principal investigator for NASA?s Moon Mineralogy Mapper, known as M3, which was carried on India?s Chandrayaan-1 lunar-orbiting spacecraft. That probe was lofted by the Indian Space Research Organization in October 2008 and operated around the moon until late August 2009. Among other findings, the M3 gear found a whole new range of processes for mineral concentrations on the moon unappreciated until now. For example, the M3 experiment detected a new lunar rock a unique mixture of plain-old plagioclase plentiful in the Earth’s crust and the moon’s highlands and pink spinel, an especially beautiful arrangement of magnesium, aluminum and oxygen that, in its purest forms, is prized as a gemstone here on Earth. What about the whereabouts of precious elements sitting there on our celestial neighbor in gravitational lock? Pieters said lunar scientists have a good idea how lunar rare earth elements became concentrated. It occurred as part of the moon's magma ocean differentiation sequence. But it is now also recognized that "early events disrupted and substantially reorganized that process in ways we are still trying to decipher," she added. With the recent, but limited, new data for the moon from the international fleet of lunar orbiters with remote sensing instruments ?? from Europe, Japan, China, India and now the United States, "we are beginning to see direct evidence for the activity of geologic processes that separate and concentrate different minerals," Pieters said. On the moon, these areas and outcrops are local and small. Exposure is largely dependent on using impact craters as probes to the interior. Current data are only sufficient to indicate the presence of some concentrations of minerals, but are inadequate to survey and map their character and distribution, Pieters observed. Lunar KREEP creep Also working in the lunar mineral fray is Leslie Gertsch, a space mining expert and deputy director of the Rock Mechanics and Explosives Research Center at the Missouri University of Science and Technology in Rolla. She’s got the low-down on KREEP. KREEP is an acronym based on element symbols for the geochemical component in lunar rocks rich in potassium (K), rare-earth elements (REE), phosphorus (P), thorium, and other incompatible elements, Gertsch explained. "These elements are not incorporated into common rock-forming minerals during magma crystallization ? hence they become enriched in the residual magma and in the rocks that finally do form from it. This is especially so on the moon," Gertsch said. One popular model for the moon?s formation is that it solidified from a global magma ocean formed from material that aggregated after the young Earth impacted a Mars-sized planet, she explained. KREEP is exposed on the lunar surface in certain areas, Gertsch said. Although rare earth elements are not themselves presently detectable by remote instruments, spotting thorium sharpens the ability to spot associated rare-earth elements on the moon's surface due to similar geochemical properties that caused them to crystallize under the same conditions, she added. "However, separating rare earth elements from each other is difficult," Gertsch noted, "because there are few properties where they differ significantly enough to permit efficient sorting of ore particles ? at least by standard methods." Gertsch said that rare earth elements do sometimes occur in the ores of other metals. "Presumably REE mixtures could be produced on the moon and shipped to Earth for more specific separation. Neither potential mining methods nor the economics of this particular approach have been studied, to my knowledge," Gertsch concluded.

US military power eroded by Chinese control of rare earth elements – results in Chinese supremacy

Richardson ‘10 (Michael, Visiting senior research fellow at the Institute of South East Asian Studies in Singapore, “China’s Chokehold on Rare-Earth Minerals Raises Concerns”, YaleGlobal, October 8th, <http://yaleglobal.yale.edu/content/chinas-rare-earth-minerals>)

Yet China could keep its dominant grip on the rare-earths industry for some years. It holds 35 percent of global reserves, but supplies over 95 percent of demand for rare-earth oxides, of which 60 percent is domestic, according to Industrial Minerals Company of Australia, a consultancy. Just as important, Chinese companies, many of them state-controlled, have advanced in their quest to make China the world leader in processing rare-earth metals into finished materials. Success in this quest could give China a decisive advantage not just in civilian industry, including clean energy, but also in military production if Chinese manufacturers were given preferential treatment over foreign competitors. Cerium is the most abundant of the 17 rare earths, all of which have similar chemical properties. A cerium-based coating is non-corrosive and has significant military applications. The Pentagon is due to finish a report soon on the risks of US military dependence on rare earths from China. Their use is widespread in the defense systems of the US, its allies, and other countries that buy its weapons and equipment. In a report to the US Congress in April, the Government Accountability Office said that it had been told by officials and defense industry executives that where rare-earth alloys and other materials were used in military systems, they were “responsible for the functionality of the component and would be difficult to replace without losing performance.” For example, fin actuators in precision-guided bombs are specifically designed around the capabilities of neodymium iron boron rare-earth magnets. The main US battle tank, the M1A2 Abrams, has a reference and navigation system that relies on samarium cobalt magnets from China. An official report last year on the US national defense stockpile said that shortages of four rare earths – lanthanum, cerium, europium and gadolinium – had already caused delays in producing some weapons. It recommended further study to determine the severity of the delays.

**U.S. Weapons Systems Dependent on Rare Earth Elements from China**

**Brinkerhoff & Wallechinsky ’11** (Noel & David, correspondent for All Gov New and professional writer for State Net Capitol Journal & correspondent for All Gov News and vice president of the International Society of Olympic Historians respectively. “U.S. Weapons Systems Dependent on Rare Earth Elements from China”, All Gov News. <http://www.allgov.com/Top_Stories/ViewNews/US_Weapons_Systems_Dependent_on_Rare_Earth_Elements_from_China_110411> Monday, April 11, 2011, DOA: 7/21/11 JL)

Having given up years ago on mining its own rare earth minerals, leaving it vulnerable to Chinese imports, the United States now finds itself in a potentially precarious position of not having the necessary materials for important military weapons. An analysis by the Congressional Research Service has revealed that the Department of Defense is dependent on two rare-earth minerals, samarium cobalt and neodymium iron boron, for the production of special magnets for precision-guided missiles, smart bombs and aircraft. Specifically, the magnets are found in: Fin actuators in missile guidance and control systems, controlling the direction of the missile; Disk drive motors installed in aircraft, tanks, missile systems, and command and control centers; Lasers for enemy mine detection, interrogators, underwater mines, and countermeasures; Satellite communications, radar, and sonar on submarines and surface ships. Optical equipment and speakers. Rare earth elements are essential for the production of numerous weapons in the U.S. arsenal, including Tomahawk cruise-missiles, smart bombs, Predator drones, electromagnetic railguns, laser weapons, the electric motors in Joint-Strike Fighters, radar, and submarine communications systems. From the 1960s to the 1980s, the United States was the leading producer of rare earths. However, after that production shifted to China in order to take advantage of cheap labor and weak-to-non-existent environmental regulation. China now controls 97% of the rare earth mineral market. Last October, it slashed its exports 70%, and then trimmed its quotas for 2011 by 35%. These moves left officials in Washington scrambling to determine if a loss of access to rare earth minerals could become a national security problem. An American mining company, Molycorp Minerals, is seeking to reopen its mine in California’s Mojave Desert, which could alleviate some of the U.S. dependence on China.

**U.S. Command of the Global Commons Gives Other Nations Incentive to Accept U.S. Hegemony**

Posen 03, Barry R. "*Command of the Commons: The Military Foundation of U.S. Hegemony*." [International Security](http://spacedebate.org/source/International%20Security). Vol. 28, No. 1 (Summer 2003) <http://spacedebate.org/evidence/1730/>, Summer 2003, DOA: 7/27/11 KT & JL)

One pillar of U.S. hegemony is the vast military power of the United States. A staple of the U.S. debate about the size of the post–Cold War defense budget is the observation that the United States spends more than virtually all of the world’s other major military powers combined, most of which are U.S. allies. Observers of the actual capabilities that this effort produces can focus on a favorite aspect of U.S. superiority to make the point that the United States sits comfortably atop the military food chain, and is likely to remain there. This article takes a slightly different approach. Below I argue that the United States enjoys command of the commons—command of the sea, space, and air. I discuss how command of the commons supports a hegemonic grand strategy. I explain why it seems implausible that a challenge to this command could arise in the near to medium term. Then I review the arenas of military action where adversaries continue to be able to ªght U.S. forces with some hope of success—the “contested zones.” I argue that in the near to medium term the United States will not be able to establish command in these arenas. The interrelationship between U.S. command of the commons and the persistence of the contested zones suggests that the United States can probably pursue a policy of selective engagement but not one of primacy. Command of the commons creates additional collective goods for U.S. allies. These collective goods help connect U.S. military power to seemingly prosaic welfare concerns. U.S. military power underwrites world trade, travel, global telecommunications, and commercial remote sensing, which all depend on peace and order in the commons. Those nations most involved in these activities, those who profit most from globalization, seem to understand that they benefit from the U.S. military position which may help explain why the world’s consequential powers have grudgingly supported U.S. hegemony.

US leadership solves all other impacts – collapse of primacy results in nuclear war

Thayer ‘06 (Bradley A., Assistant Professor of Political Science at the University of Minnesota, Duluth, The National Interest, November -December, “In Defense of Primacy”, lexis)

A remarkable fact about international politics today--in a world where American primacy is clearly and unambiguously on display--is that countries want to align themselves with the United States. Of course, this is not out of any sense of altruism, in most cases, but because doing so allows them to use the power of the United States for their own purposes--their own protection, or to gain greater influence. Of 192 countries, 84 are allied with America--their security is tied to the United States through treaties and other informal arrangements--and they include almost all of the major economic and military powers. That is a ratio of almost 17 to one (85 to five), and a big change from the Cold War when the ratio was about 1.8 to one of states aligned with the United States versus the Soviet Union. Never before in its history has this country, or any country, had so many allies. U.S. primacy--and the bandwagoning effect--has also given us extensive influence in international politics, allowing the United States to shape the behavior of states and international institutions. Such influence comes in many forms, one of which is America's ability to create coalitions of like-minded states to free Kosovo, stabilize Afghanistan, invade Iraq or to stop proliferation through the Proliferation Security Initiative (PSI). Doing so allows the United States to operate with allies outside of the UN, where it can be stymied by opponents. American-led wars in Kosovo, Afghanistan and Iraq stand in contrast to the UN's inability to save the people of Darfur or even to conduct any military campaign to realize the goals of its charter. The quiet effectiveness of the PSI in dismantling Libya's WMD programs and unraveling the A. Q. Khan proliferation network are in sharp relief to the typically toothless attempts by the UN to halt proliferation. You can count with one hand countries opposed to the United States. They are the "Gang of Five": China, Cuba, Iran, North Korea and Venezuela. Of course, countries like India, for example, do not agree with all policy choices made by the United States, such as toward Iran, but New Delhi is friendly to Washington. Only the "Gang of Five" may be expected to consistently resist the agenda and actions of the United States. China is clearly the most important of these states because it is a rising great power. But even Beijing is intimidated by the United States and refrains from openly challenging U.S. power. China proclaims that it will, if necessary, resort to other mechanisms of challenging the United States, including asymmetric strategies such as targeting communication and intelligence satellites upon which the United States depends. But China may not be confident those strategies would work, and so it is likely to refrain from testing the United States directly for the foreseeable future because China's power benefits, as we shall see, from the international order U.S. primacy creates. The other states are far weaker than China. For three of the "Gang of Five" cases--Venezuela, Iran, Cuba--it is an anti-U.S. regime that is the source of the problem; the country itself is not intrinsically anti-American. Indeed, a change of regime in Caracas, Tehran or Havana could very well reorient relations. THROUGHOUT HISTORY, peace and stability have been great benefits of an era where there was a dominant power--Rome, Britain or the United States today. Scholars and statesmen have long recognized the irenic effect of power on the anarchic world of international politics. Everything we think of when we consider the current international order--free trade, a robust monetary regime, increasing respect for human rights, growing democratization--is directly linked to U.S. power. Retrenchment proponents seem to think that the current system can be maintained without the current amount of U.S. power behind it. In that they are dead wrong and need to be reminded of one of history's most significant lessons: Appalling things happen when international orders collapse. The Dark Ages followed Rome's collapse. Hitler succeeded the order established at Versailles. Without U.S. power, the liberal order created by the United States will end just as assuredly. As country and western great Ral Donner sang: "You don't know what you've got (until you lose it)." Consequently, it is important to note what those good things are. In addition to ensuring the security of the United States and its allies, American primacy within the international system causes many positive outcomes for Washington and the world. The first has been a more peaceful world. During the Cold War, U.S. leadership reduced friction among many states that were historical antagonists, most notably France and West Germany. Today, American primacy helps keep a number of complicated relationships aligned--between Greece and Turkey, Israel and Egypt, South Korea and Japan, India and Pakistan, Indonesia and Australia. This is not to say it fulfills Woodrow Wilson's vision of ending all war. Wars still occur where Washington's interests are not seriously threatened, such as in Darfur, but a Pax Americana does reduce war's likelihood, particularly war's worst form: great power wars. Second, American power gives the United States the ability to spread democracy and other elements of its ideology of liberalism. Doing so is a source of much good for the countries concerned as well as the United States because, as John Owen noted on these pages in the Spring 2006 issue, liberal democracies are more likely to align with the United States and be sympathetic to the American worldview.3 So, spreading democracy helps maintain U.S. primacy. In addition, once states are governed democratically, the likelihood of any type of conflict is significantly reduced. This is not because democracies do not have clashing interests. Indeed they do. Rather, it is because they are more open, more transparent and more likely to want to resolve things amicably in concurrence with U.S. leadership. And so, in general, democratic states are good for their citizens as well as for advancing the interests of the United States. Critics have faulted the Bush Administration for attempting to spread democracy in the Middle East, labeling such an effort a modern form of tilting at windmills. It is the obligation of Bush's critics to explain why democracy is good enough for Western states but not for the rest, and, one gathers from the argument, should not even be attempted. Of course, whether democracy in the Middle East will have a peaceful or stabilizing influence on America's interests in the short run is open to question. Perhaps democratic Arab states would be more opposed to Israel, but nonetheless, their people would be better off. The United States has brought democracy to Afghanistan, where 8.5 million Afghans, 40 percent of them women, voted in a critical October 2004 election, even though remnant Taliban forces threatened them. The first free elections were held in Iraq in January 2005. It was the military power of the United States that put Iraq on the path to democracy. Washington fostered democratic governments in Europe, Latin America, Asia and the Caucasus. Now even the Middle East is increasingly democratic. They may not yet look like Western-style democracies, but democratic progress has been made in Algeria, Morocco, Lebanon, Iraq, Kuwait, the Palestinian Authority and Egypt. By all accounts, the march of democracy has been impressive. Third, along with the growth in the number of democratic states around the world has been the growth of the global economy. With its allies, the United States has labored to create an economically liberal worldwide network characterized by free trade and commerce, respect for international property rights, and mobility of capital and labor markets. The economic stability and prosperity that stems from this economic order is a global public good from which all states benefit, particularly the poorest states in the Third World. The United States created this network not out of altruism but for the benefit and the economic well-being of America. This economic order forces American industries to be competitive, maximizes efficiencies and growth, and benefits defense as well because the size of the economy makes the defense burden manageable. Economic spin-offs foster the development of military technology, helping to ensure military prowess. Perhaps the greatest testament to the benefits of the economic network comes from Deepak Lal, a former Indian foreign service diplomat and researcher at the World Bank, who started his career confident in the socialist ideology of post-independence India. Abandoning the positions of his youth, Lal now recognizes that the only way to bring relief to desperately poor countries of the Third World is through the adoption of free market economic policies and globalization, which are facilitated through American primacy.4 As a witness to the failed alternative economic systems, Lal is one of the strongest academic proponents of American primacy due to the economic prosperity it provides. Fourth and finally, the United States, in seeking primacy, has been willing to use its power not only to advance its interests but to promote the welfare of people all over the globe. The United States is the earth's leading source of positive externalities for the world. The U.S. military has participated in over fifty operations since the end of the Cold War--and most of those missions have been humanitarian in nature. Indeed, the U.S. military is the earth's "911 force"--it serves, de facto, as the world's police, the global paramedic and the planet's fire department. Whenever there is a natural disaster, earthquake, flood, drought, volcanic eruption, typhoon or tsunami, the United States assists the countries in need. On the day after Christmas in 2004, a tremendous earthquake and tsunami occurred in the Indian Ocean near Sumatra, killing some 300,000 people. The United States was the first to respond with aid. Washington followed up with a large contribution of aid and deployed the U.S. military to South and Southeast Asia for many months to help with the aftermath of the disaster. About 20,000 U.S. soldiers, sailors, airmen and marines responded by providing water, food, medical aid, disease treatment and prevention as well as forensic assistance to help identify the bodies of those killed. Only the U.S. military could have accomplished this Herculean effort. No other force possesses the communications capabilities or global logistical reach of the U.S. military. In fact, UN peacekeeping operations depend on the United States to supply UN forces. American generosity has done more to help the United States fight the War on Terror than almost any other measure. Before the tsunami, 80 percent of Indonesian public opinion was opposed to the United States; after it, 80 percent had a favorable opinion of America. Two years after the disaster, and in poll after poll, Indonesians still have overwhelmingly positive views of the United States. In October 2005, an enormous earthquake struck Kashmir, killing about 74,000 people and leaving three million homeless. The U.S. military responded immediately, diverting helicopters fighting the War on Terror in nearby Afghanistan to bring relief as soon as possible. To help those in need, the United States also provided financial aid to Pakistan; and, as one might expect from those witnessing the munificence of the United States, it left a lasting impression about America. For the first time since 9/11, polls of Pakistani opinion have found that more people are favorable toward the United States than unfavorable, while support for Al-Qaeda dropped to its lowest level. Whether in Indonesia or Kashmir, the money was well-spent because it helped people in the wake of disasters, but it also had a real impact on the War on Terror. When people in the Muslim world witness the U.S. military conducting a humanitarian mission, there is a clearly positive impact on Muslim opinion of the United States. As the War on Terror is a war of ideas and opinion as much as military action, for the United States humanitarian missions are the equivalent of a blitzkrieg. THERE IS no other state, group of states or international organization that can provide these global benefits. None even comes close. The United Nations cannot because it is riven with conflicts and major cleavages that divide the international body time and again on matters great and trivial. Thus it lacks the ability to speak with one voice on salient issues and to act as a unified force once a decision is reached. The EU has similar problems. Does anyone expect Russia or China to take up these responsibilities? They may have the desire, but they do not have the capabilities. Let's face it: for the time being, American primacy remains humanity's only practical hope of solving the world's ills.

**1AC – Adv – Energy**

Helium-3 is a practical energy source

Schmitt, ’05 (Harrison H., former senator for New Mexico and NASA astronaut, Ph.D. from Harvard, and current staff of the U.S. Geological Survey’s astrogeology branch in Arizona, “Mining the Moon”, Popular Mechanics, <http://www.searchanddiscovery.com/documents/2004/schmitt/images/schmitt.pdf>, January 14, 2005, DOA: 7/21/11 KT)

Throughout history, the search for precious resources—from food to minerals to energy—inspired humanity to explore and settle ever-more-remote regions of our planet. I believe that helium-3 could be the resource that makes the settlement of our moon both feasible and desirable (Figure 1). Although quantities sufficient for research exist, no commercial supplies of helium-3 are present on Earth. If they were, we probably would be using them to produce electricity today. The more we learn about building fusion reactors, the more desirable a helium- 3-fueled reactor becomes. Researchers have tried several approaches to harnessing the awesome power of hydrogen fusion to generate electricity. The stumbling block is finding a way to achieve the temperatures required to maintain a fusion reaction. All materials known to exist melt at these surface-of-the-sun temperatures. For this reason, the reaction can take place only within a magnetic containment field, a sort of electromagnetic Thermos bottle. Initially, scientists believed they could achieve fusion using deuterium, an isotope of hydrogen found in seawater. They soon discovered that sustaining the temperatures and pressures needed to maintain the so-called deuterium-deuterium fusion reaction for days on end exceeded the limits of the magnetic containment technology. Substituting helium-3 for tritium allows the use of electrostatic confinement, rather than needing magnets, and greatly reduces the complexity of fusion reactors as well as eliminates the production of high-level radioactive waste (Figure 3). These differences will make fusion a practical energy option for the first time. It is not a lack of engineering skill that prevents us from using helium-3 to meet our energy needs, but a lack of the isotope itself. Vast quantities of helium originate in the sun, a small part of which is helium-3, rather than the more common helium-4 (Figure 4). Both types of helium are transformed as they travel toward Earth as part of the solar wind. The precious isotope never arrives because Earth’s magnetic field pushes it away. Fortunately, the conditions that make helium-3 rare on Earth are absent on the moon, where it has accumulated on the surface and been mixed with the debris layer of dust and rock, or regolith, by constant meteor strikes (Figure 5). And there it waits for the taking. An aggressive program to mine helium-3 from the surface of the moon would not only represent an economically practical justification for permanent human settlements; it could yield enormous benefits back on Earth.

**Small amounts of Helium-3 would be able to power large cities for a year**

Schmitt, ’05 (Harrison H., former senator for New Mexico and NASA astronaut, Ph.D. from Harvard, and current staff of the U.S. Geological Survey’s astrogeology branch in Arizona, “Mining the Moon”, Popular Mechanics, <http://www.searchanddiscovery.com/documents/2004/schmitt/images/schmitt.pdf>, January 14, 2005, DOA: 7/21/11 KT)

Samples collected in 1969 by Neil Armstrong during the first lunar landing showed that helium-3 concentrations in lunar soil are at least 13 parts per billion (ppb) by weight. Levels may range from 20 to 30 ppb in undisturbed soils. Quantities as small as 20 ppb may seem too trivial to consider. But at a projected value of $40,000 per ounce, 220 pounds of helium-3 would be worth about $141 million. Because the concentration of helium- 3 is extremely low, it would be necessary to process large amounts of rock and soil to isolate the material. Digging a patch of lunar surface roughly three-quarters of a square mile to a depth of about 9 ft. should yield about 220 pounds of helium-3— enough to power a city the size of Dallas or Detroit for a year. Although considerable lunar soil would have to be processed, the mining costs would not be high by terrestrial standards.

Scenario 1: Environment

**Mining energy sources on the moon is necessary to sustain human life and our environment**

Garan ‘10 (Ron, 3/30/10, Astronaut, speech published in an article by Nancy Atkinson, “The Importance of Returning to the Moon,” <http://www.universetoday.com/61256/astronaut-explains-why-we-should-return-to-the-moon/> DOA: 7/24/11 KT)

Today, about 1.6 billion people on the Earth don’t have access to electricity. The World Bank estimates that 1.1 billion people live in extreme poverty which leads to 8 million premature deaths every year. In developed countries, higher quality of life is achieved only through a high rate of energy use. Increased energy supply is needed for economic and social development, improved quality of life, and to grow enough food to provide for the citizens of the developing world. Unless something is done soon, the world will be faced with a crisis of enormous proportions. The United Nations estimates that world population will be approximately 9.1 billion by 2050 with virtually all growth in the 50 poorest countries. The choices that society makes to provide for future energy needs will have a profound effect on humanity and the environment. The moon can supplement Earth-based renewable energy systems to meet future energy demand. Ample energy from the Sun reaches the moon and is not interrupted by weather, pollution or volcanic ash. Solar energy farms on the moon can “beam” limitless clean energy down to where it is needed on Earth or to satellites for relay to the Earth. There are also other potential sources of energy including platinum for fuel cells and an isotope called helium-3, which could be used in fusion reactors of the future. Supplying energy from the moon will enable us to help provide the Earth’s energy needs without destroying our environment.

**Reliance on fossil fuels causes dangerous pollution and international conflict – mining lunar resources solves**

Whittington ’04 (Mark R, space policy analyst and author of Children of Apollo,”Worlds next energy source may be just a moon away”, USA Today, <http://www.usatoday.com/news/opinion/editorials/2004-12-08-energy-source_x.htm>, 12/8/04, DOA: 7/23/11 KT)

Earth's energy needs are currently met, primarily, by fossil fuels such as oil, coal and natural gas. The byproducts of this reliance include pollution and, since much of these resources reside in unstable parts of the world, international turmoil and even war. Inexplicably, many supporters of the space initiative have not mentioned the moon's potential as an energy source. The president did not mention fusion energy or Helium 3 in his speech announcing his initiative last January. Gerald Kulcinski, director of the University of Wisconsin Fusion Technology Institute, said this oversight may be part of an institutional bias. "NASA doesn't believe we can ever get fusion to work, and the Department of Energy never thought we'd go back to the moon," he said. Paul Spudis — a member of the Bush-appointed commission that recommended ways to implement his initiative — had a different explanation. "Fundamentally, the vision deals only with the creation of space-faring capability and the exploration enabled by such; it does not specifically deal in possible future lunar commodities, although it recognizes their eventual utility."Government officials are silent as to why no one seems willing to talk about any commercial opportunity to justify the expense of returning to the moon. But as early as 1988, NASA sponsored a conference on fusion energy and Helium 3. The conference concluded that Helium 3 "offers significant, possibly compelling, advantages over fusion of tritium, principally increased reactor life, reduced radioactive wastes and high efficiency conversion. Opponents of the president's initiative also seem unaware of the moon's potential as an energy source. The American Physical Society recently issued a report that decried what it considers the high cost of the initiative. Nevertheless, Helium 3 advocates believe the president's initiative provides a priceless opportunity. Scientists at the Fusion Technology Institute would like to send their mining equipment to the moon to see how it would work. For every ton of Helium 3 extracted from lunar soil, researchers say, nine tons of oxygen, water and other life-sustaining substances, as well as six tons of hydrogen useful for powering fuel cells, would be yielded. It would seem that, even given the 10- to 30-year time frame necessary to make Helium 3 fusion power a reality, its prospect provides an unassailable rationale for pressing on with the initiative. Science and the "spirit of exploration" are noble things, but they are often considered optional when stacked against earthly needs. But the prospect of clean, virtually limit less energy from the moon would be enough to sustain any program of exploration over decades, across many presidential administrations and congresses, and costing tens of billions of dollars.

Increased fossil fuel use cause ozone depletion

IPCC ’09 (Intergovernmental Panel on Climate Change, Union of Concerned Scientists, <http://www.ucsusa.org/global_warming/science_and_impacts/science/global-warming-faq.html>, July 14, 2009 DOA: 7/25/11 JL)

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) states: it is a greater than a 90 percent certainty that emissions of heat-trapping gases from human activities have caused “most of the observed increase in globally averaged temperatures since the mid-20th century.” We all know that warming—and cooling—has happened in the past, and long before humans were around. Many factors (called “climate drivers”) can influence Earth’s climate—such as changes in the sun’s intensity and volcanic eruptions, as well as heat-trapping gases in the atmosphere. So how do scientists know that today’s warming is primarily caused by humans putting too much carbon in the atmosphere when we burn coal, oil, and gas or cut down forests? There are human fingerprints on carbon overload. When humans burn coal, oil and gas (fossil fuels) to generate electricity or drive our cars, carbon dioxide is released into the atmosphere, where it traps heat. A carbon molecule that comes from fossil fuels and deforestation is “lighter” than the combined signal of those from other sources. As scientists measure the “weight” of carbon in the atmosphere over time they see a clear increase in the lighter molecules from fossil fuel and deforestation sources that correspond closely to the known trend in emissions.

Ozone depletion causes extinction

Greenpeace in ’95 (“Full of Homes: The Montreal Protocol and the Continuing Destruction of the Ozone Layer, http://archive.greenpeace.org/ozone/holes/holebg.html)

When chemists Sherwood Rowland and Mario Molina first postulated a link between chlorofluorocarbons and ozone layer depletion in 1974, the news was greeted with scepticism, but taken seriously nonetheless. The vast majority of credible scientists have since confirmed this hypothesis. The ozone layer around the Earth shields us all from harmful ultraviolet radiation from the sun. Without the ozone layer, life on earth would not exist. Exposure to increased levels of ultraviolet radiation can cause cataracts, skin cancer, and immune system suppression in humans as well as innumerable effects on other living systems. This is why Rowland's and Molina's theory was taken so seriously, so quickly - the stakes are literally the continuation of life on earth

Scenario 2: Resource Wars

Current resources are finite- only mining lunar resources prevents resource wars and extinction

Garan ‘10 (Ron, 3/30/10, Astronaut, speech published in an article by Nancy Atkinson, “The Importance of Returning to the Moon,” <http://www.universetoday.com/61256/astronaut-explains-why-we-should-return-to-the-moon/> DOA: 7/24/11 KT)

Since we live in a world of finite resources and the global population continues to grow, at some point the human race must utilize resources from space in order to survive. We are already constrained by our limited resources, and **the decisions we make today will have a profound affect on the future of humanity**. Using resources and energy from space will enable continued growth and the spread of prosperity to the developing world without destroying our planet. Our minimal investment in space exploration (less than 1 percent of the U.S. budget) reaps tremendous intangible benefits in almost every aspect of society, from technology development to high-tech jobs. When we reach the point of sustainable space operations we will be able to transform the world from a place where nations quarrel over scarce resources to one where the basic needs of all people are met and we unite in the common adventure of exploration. The first step is a sustainable permanent human lunar settlement.

Scenario 3 - Economy

Dependence on other countries for fossil fuels places economy in jeopardy

Hall ’10 (Shane, writer and research analyst for various Texas newspapers, Ph.D. in Philosophy of political economy and former college instructor of economics, “The Economic Impacts of Fossil Fuels”, [eHow.com](http://www.ehow.com/list_6117874_economic-impacts-fossil-fuels.html#ixzz1TFspEmaA) <http://www.ehow.com/list_6117874_economic-impacts-fossil-fuels.html#ixzz1TFspEmaA>,

May 25, 2010, DOA: 7/25/11 JL)

Although the United States has large [deposits](http://www.ehow.com/list_6117874_economic-impacts-fossil-fuels.html) of two fossil fuels---coal and natural gas---it imports the majority of its oil. Oil's dominance as fuel for the nation's drivers and transportation systems means the United States must depend on a steady supply. Much of the world's oil deposits exist in politically unstable parts of the world, such as the Middle East. American dependence on imported oil creates economic risks because of a lack of control over the supply of oil. A disruption in supply, such as the Arab embargo in the early 1970s, taken in retaliation for U.S. support of Israel, forced gasoline rationing and high prices at the pumps. A dependence on imported oil, a key element in driving the U.S. economy, raises the nation's trade deficit and places the economy at the mercy of foreign suppliers. Any disruption in the supply or spike in the price of oil will have serious consequences for U.S. consumers and businesses.

**Dependence on fossil fuels causes economic recessions**

Lynch ’08 (Peter J., financial consultant for major energy companies, and editor for Photovltaics Insider Report, “The True Cost of Fossil Fuels”, Renewable Energy World, <http://www.renewableenergyworld.com/rea/news/article/2008/05/the-true-cost-of-fossil-fuels-52359>, May 12, 2008, DOA: 7/25/11, JL)

What is the price you pay to purchase a gallon of gasoline for your car? Depending on what part of the country you live in, it is probably between $3.50 and $4.00 per gallon. But is this the "real cost" of the gasoline? True, it is the actual price you paid at the pump. But is it the total "real cost" that you and all of us are paying for our continued dependence on fossil fuels? I think not. Everyone knows the posted price, but very few realize the true costs. There are a number of "hidden" costs that most of us do not realize. It may not be obvious but we are quietly paying these additional costs every day. These additional indirect costs actually make the "real" cost of the gasoline and all other fossil fuel related items many times higher than it seems at first glance. In my opinion, "Energy" is the number one problem facing the U.S and the world as we move forward in a global economy. All other problems — health care, social security, housing crisis, credit crunch etc. are ALL "small change" compared to the looming worldwide energy crisis. Reasonably priced, available energy is what separates the U.S from third world countries. This problem must be addressed rapidly, with a detailed long term plan that MUST be based upon a comprehensive accurate evaluation and assessment. Unfortunately our government does not utilize all of the necessary cost components in order to arrive at an accurate "true cost" number. As a result, we are using a faulty equation, which, of course, will result, EVERY SINGLE TIME, in an incorrect answer

Every recession in recent history has been immediately preceded by an oil or natural gas price run up. These "oil shocks" result in the loss of hundreds of billions of dollars for our economy and the economies around the world. These problems can be politically driven or supply driven, but in either case it is the result of our excessive dependence on a non-renewable source of energy. This repeated volatility of oil prices is a major "hidden" cost and a very significant risk factor for the stability of the world's economies. Currently the U.S. is spending approximately $1.5 to $1.75 BILLION PER DAY on imported oil this is a huge drain on our economy and on the confidence levels of consumers everywhere.

Economic collapse causes extinction.

Bearden ‘00(Tom, Retired Lieutenant-Colonel, “The Unnecessary Energy Crisis: How to Solve it Quickly,” <http://www.freerepublic.com/forum/a3aaf97f22e23.htm>)

History bears out that desperate nations take desperate actions. Prior to the final economic collapse, the stress on nations will have increased the intensity and number of their conflicts, to the point where the arsenals of weapons of mass destruction (WMD) now possessed by some 25 nations, are almost certain to be released. As an example, suppose a starving North Korea launches nuclear weapons upon Japan and South Korea, including U.S. forces there, in a spasmodic suicidal response. Or suppose a desperate China-whose long-range nuclear missiles (some) can reach the United States-attacks Taiwan. In addition to immediate responses, the mutual treaties involved in such scenarios will quickly draw other nations into the conflict, escalating it significantly. Strategic nuclear studies have shown for decades that, under such extreme stress conditions, once a few nukes are launched, adversaries and potential adversaries are then compelled to launch on perception of preparations by one's adversary. The real legacy of the MAD concept is this side of the MAD coin that is almost never discussed. Without effective defense, the only chance a nation has to survive at all is to launch immediate full-bore pre-emptive strikes and try to take out its perceived foes as rapidly and massively as possible. As the studies showed, rapid escalation to full WMD exchange occurs. Today, a great percent of the WMD arsenals that will be unleashed, are already on site within the United States itself. The resulting great Armageddon will destroy civilization as we know it, and perhaps most of the biosphere, at least for many decades.

Hegemony 2AC Extensions

**China tightening control over rare earth metal exports**

Bradsher ’09 (Keith, Hong Kong bureau chief of *The New York Times*, “China Tightens Grip on Rare Minerals”, The New York Times, <http://www.nytimes.com/2009/09/01/business/global/01minerals.html?pagewanted=all>, August 31, 2009, DOA: 7/21/11 JL)

HONG KONG — China is set to tighten its hammerlock on the market for some of the world’s most obscure but valuable minerals. China currently accounts for 93 percent of production of so-called rare earth elements — and more than 99 percent of the output for two of these elements, dysprosium and terbium, vital for a wide range of green energy technologies and military applications like missiles. [Deng Xiaoping](http://topics.nytimes.com/top/reference/timestopics/people/d/deng_xiaoping/index.html?inline=nyt-per) once observed that the Mideast had oil, but China had rare earth elements. As the Organization of the Petroleum Exporting Countries has done with oil, China is now starting to flex its muscle. Even tighter limits on production and exports, part of a plan from the Ministry of Industry and Information Technology, would ensure China has the supply for its own technological and economic needs, and force more manufacturers to make their wares here in order to have access to the minerals. In each of the last three years, China has reduced the amount of rare earths that can be exported. This year’s export quotas are on track to be the smallest yet. But what is really starting to alarm Western governments and multinationals alike is the possibility that exports will be further restricted.

Chinese Hegemony results in Global War

Farzan ’10 (Alex, staff writer for *The California Review*, “The Rise of China” The California Review, <http://ucsdcalrev.wordpress.com/2010/01/16/the-rise-of-china/> January 16, 2010, DOA: 7/22/11 JL)

After many years of political, economic, and worldwide authority American dominance of the world is now in question. Other states are beginning to play a larger role in the world, and a newer world order may be emerging. China, in particular, is rapidly growing and is showing signs of joining America as one of the world’s superpowers. While many say that the rise of China and the development of a bipolar international system would lead to more peaceful interstate relations, others argue that international systems are more peaceful when they are unipolar. In the following paper, I will argue why the Chinese challenge to American hegemony is in fact the most important threat to international peace in the future, and that it is in our international system’s best interest for there to be continued American unipolar dominance of the world. I will also show that transitions from one hegemon to another will almost always lead to world conflict and war. Lastly, I will explain why a democratic hegemon is more likely to foster world peace and order than an autocratic hegemon, like China. Ever since the middle of the 20th century, America has maintained the position of the world’s dominating superpower. If China were to challenge American hegemony in the future, our international system may face something similar to what happened during the Cold War: a bipolar international system. Some critics of the Cold War claim that it was a time of peace, and that the bipolar international system was an effective way to facilitate conflicts throughout the world. However, while it may have seemed peaceful to some, others speak against this claim and argue that the Cold War period was not peaceful by any means. As a matter of fact, the bipolar international system during the cold war stirred many conflicts and also encouraged the world to split into two sides: democratic America, and Communist USSR. True, the major powers of the world never engaged in war; however, as Professor Roeder presented in a lecture in his Political Science 12 course, “conflict between the superpowers was displaced to the periphery and was fought through proxies in the cold war.” Another negative result of the bipolar international system during the Cold War was the division that took place in Europe. “The US announced that it would support governments in Europe fighting against communist pressure, and Europe became divided- one side tied to Moscow, the other to Washington”(Roeder). Clearly, the bipolar international system did not encourage peace throughout the world, but rather created conflicts and divided states from one another. If China were to join America as a super power in the world and establish bipolarity, our international system may witness the same negative effects that the world experienced during the Cold War. This begs the question, “why is our international system better off under a unipolar balance of power?” Structural realists who argue that international systems are most peaceful when they are unipolar present a few reasons why our world is better off under the pax Americana. For one, the hegemon creates a stable international order and preserves peace throughout the world. “Since 1500, each of the major periods of long peace is associated with a hegemony of a single power”(Roeder). For example, during the pax romana the Roman Empire was the only hegemonic power in the world, and formed a long period of peace. Additionally in the 19th century, Britain was a hegemon and established a century of peace, known as the pax Britannica (Roeder). These examples show that in order for our international system to reach and maintain peace America must continue to be the world’s superpower, and any challenge to American hegemony by any other state, like china, would only interfere with our international system’s move toward peace. Moving on, another possible consequence if China were to challenge US hegemony would be a transition of power from the current hegemony to the rising challenger. This also would be a threat to international peace in the future for many reasons. Primarily, history has shown that war accompanies the transition from one hegemon to the next. According to Toynbee’s balance of power theory in Jack Levy’s Theories on Hegemonic War, “a bid for world domination by the leading power evokes an opposing coalition of all the other powers in the system and a general war to maintain the balance of power… a burst of short supplemental wars then follows.” Professor Roeder presented examples in history when war accompanied the transition from one hegemon to another. For example, Louis XIV displaced Spain, at the height of the Spanish empire, and France became the dominant power in the 18th century (Roeder). This transition of power was a period of long and deadly war between Spain and France. Next, France was replaced by the new hegemon, England, in the 19th century Napoleonic wars. And lastly, the tragedies of WW1 and WW2 allowed America to become the world’s new reigning superpower. There is a basic model that further explains what takes place when a hegemon is challenged by a rising opponent: Country A (the US in this case) begins to be the predominant power, then it begins to decline. As it is declining a challenging power begins to gain power (China), then becomes the predominant power. In between the exchange of power lies a period of war. Evidently, war and conflict will spread throughout the world if China challenges American hegemony. Lastly, there is one major difference between the United States and China that clarifies why China would be an important threat to international peace if it were to challenge American hegemony. America is a democratic state, while China is an autocratic state. David Lake points out the dangers involved when an autocratic becomes powerful in his article, Powerful Pacifists: Democratic States and War. While democracies in general are more peaceful in international relations, “autocracies will be more expansionist and, in turn, war prone” (Lake). This shows that if China’s autocratic government challenged American hegemony and looked to expand it’s borders and sphere of influence, war would be an expected consequence. Hegemonic war is something our international system obviously wants to avoid. According to Jack Levy in Theories on Hegemonic War, “these wars have been the most destructive in history and account for a disproportionate fraction of the fatalities in international violence.” In order for our world to preserve international peace and order, it needs one, democratic state to watch over the entire international system- America. If China begins to challenge American hegemony, the entire peace of our international system will be under threat, and war will erupt.